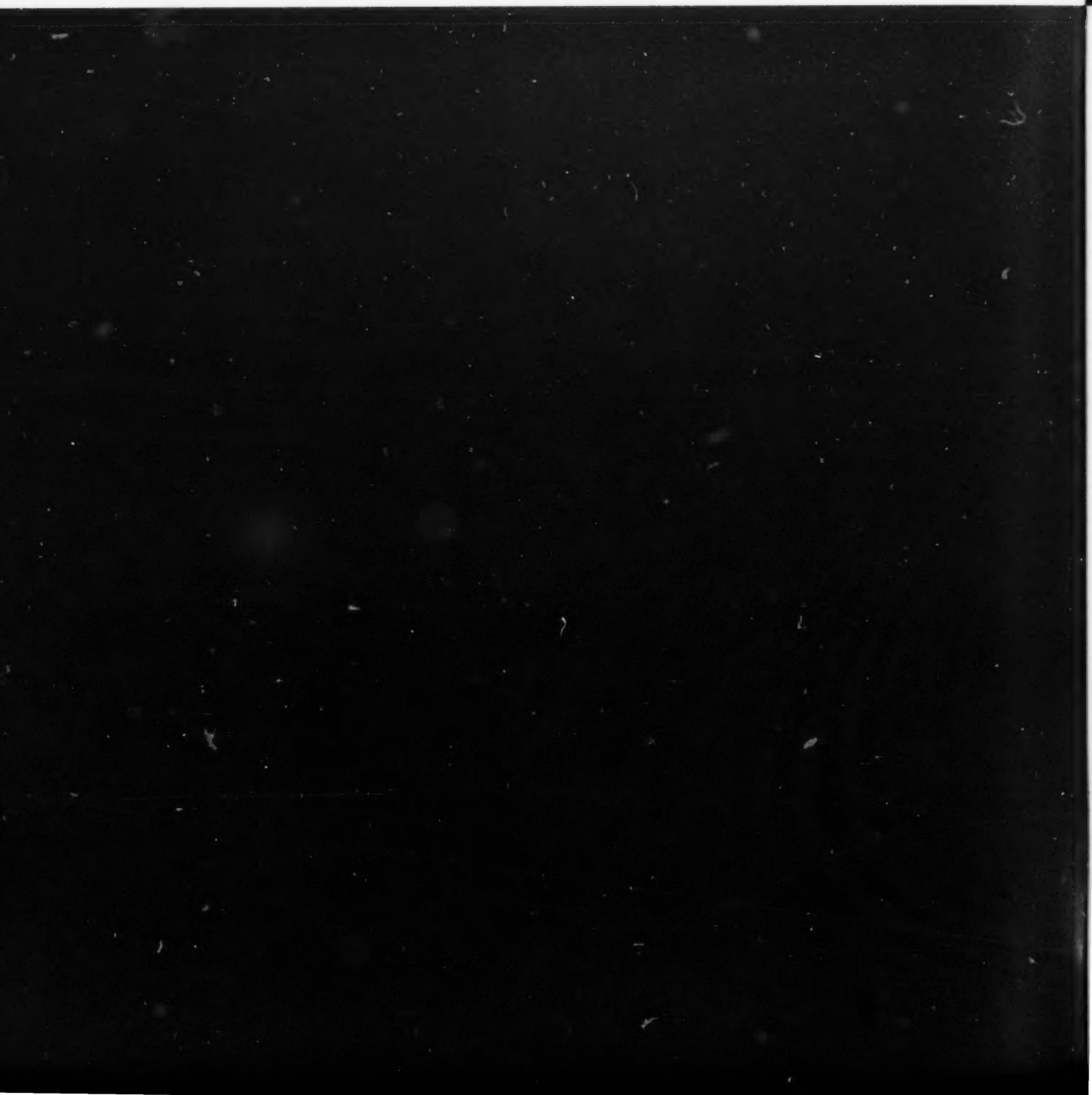
MANITOBA HEALTH RESEARCH COUNCIL

ANNUAL REPORT 2004 – 2005



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MISSION STATEMENT

"To promote the growth and co-ordination of the health research enterprise in Manitoba"

For more information contact:

MANITOBA HEALTH RESEARCH COUNCIL

P127–770 Bannatyne Avenue

Winnipeg, Manitoba, Canada R3E 0W3

Telephone: (204) 775-1096

Fax: (204) 786-5401

E-mail: info@mhrc.mb.ca

Website: www.mhrc.mb.ca

MEMBERS OF THE MANITOBA HEALTH RESEARCH COUNCIL

Dr. Jane Evans*
Chairperson
Department of Biochemistry & Medical Genetics
University of Manitoba

Mr. Dwight Barna
Assistant Deputy Minister
Manitoba Health
(to November 15, 2004)

Mr. Louis Barre
Director
Health Information Management
Manitoba Health
(from November 15, 2004)

Dr. Gary Beazley
Professor Emeritus
Department of Family Medicine
University of Manitoba

Dr. Peter Cattini*
Associate Vice President (Research)
University of Manitoba

Dr. Patrick C. Choy**
Vice-Chair, Associate Dean (Research)
Faculty of Medicine
University of Manitoba

Mr. John Clarkson
Deputy Minister
Department of Energy, Science & Technology

Dr. Joanne Embree
Department of Medical Microbiology
University of Manitoba

Dr. Norman Fleming*
Associate Dean (Research)
Faculty of Dentistry
University of Manitoba

Dr. Andrew Halayko
Associate Professor
Departments of Physiology, Internal Medicine & Pediatrics & Child Health
University of Manitoba

Dr. Colleen Metge*
Associate Professor
Faculty of Pharmacy
University of Manitoba

Dr. Yvonne Myal
Associate Professor
Department of Pathology
University of Manitoba

Dr. Suresh Mysore
Laboratory Director
Victoria General Hospital
(to December 2004)

Dr. Brent Schacter
Chief Executive Officer
Canadian Association of Provincial Cancer Agencies/L'association canadienne des agences provinciales du cancer (CAPCA/CAPC)
(from March 9, 2005)

*Members of the Executive/Finance Committee
**Appointed by the University of Manitoba

COUNCIL SECRETARIAT

Executive Director
Dr. John C. Docherty

Administrative Officer
Ms Elizabeth C. Ford

REPORT OF THE CHAIRPERSON

Dr. Jane Evans

It is my pleasure to report on the activities of the Manitoba Health Research Council during the past year, my third as chair. It is truly gratifying to see that there is now potential for real progress being made in expanding the role of the Council in the health research enterprise within the Province of Manitoba. It is no coincidence that this renewed optimism coincides with the recent transfer of reporting of MHRC from the Department of Health to the newly created Department of Energy, Science and Technology. This past year also marks the first year that MHRC has enjoyed the services of a full time executive director to strengthen Council's position as a champion of health research in the Province.

For many years, the last ten at least, there has been ongoing discussions regarding the development and implementation of a strategic plan for health research in Manitoba. Over the past year, Council has drafted a strategic plan addressing the needs of the provincial health research enterprise over the coming five years. Of particular note, much of the early discussions regarding the current state of, and future expectations for, health research in Manitoba were conducted in collaboration with the research directors of all of the local active research institutions including the University of Manitoba, St Boniface Research Centre, Manitoba Institute of Child Health, Health Sciences Research Foundation, CancerCare Manitoba, the National Research Council's Institute for Biodiagnostics, and the Canadian Science Centre for Human and Animal Health. Further input on the draft strategic plan was obtained from a diverse group of participants in the health research enterprise in Manitoba. It is anticipated that a final version of the strategic plan will be ready to present to government in the Fall of 2005, in time to be considered within the next Provincial budget cycle.

In addition to administering a grants and awards competition to disburse funds to investigators in Manitoba, the MHRC has a mandate to offer expert advice to government on issues related to health research. Sadly, over the years the government has not made extensive use of this valuable resource. I am happy to report that minister Tim Sale has rectified this oversight, calling upon Council to provide input on a variety of issues ranging from review of the Personal Health Information Act to factors affecting the competitiveness of Manitoba investigators in Genome Canada grants competitions.

Continuing on the positive note, I am very happy to report that the Province has decided to reinstate funding for the Canadian Institutes of Health Research – Regional Partnership Program (CIHR-RPP). As reported in my Report from the Chair last year, the Province determined that the RPP program was low on its list of priorities for funding. Following extensive consultations with a number of stakeholders, including members of Council, the Province agreed that the RPP is of great value to Manitoba investigators and warranted support. Over the eight years that this program has been in effect it has provided funding to a wide range of investigators and has brought to the Province in excess of 6.2 million federal research dollars that would not otherwise have been secured. This program has been an invaluable mechanism for maintaining and building health research capacity in the Province of Manitoba.

A cabinet shuffle within the Provincial government this year saw a switching of portfolios for two ministers that impact on MHRC. The honourable Tim Sale moved from Energy, Science and Technology to Health while the honourable Dave Chomiak moved from Health to Energy, Science and Technology. In the brief time that MHRC reported to Mr. Sale in his capacity as minister at EST, an excellent relationship was established and, although Council wishes him every success in his new position, we are sorry to see Mr. Sale move on. On the other hand, we are very happy that the new minister at EST is a familiar face. Mr. Chomiak is very familiar with the MHRC from his tenure as minister of Health when MHRC reported to the department of Health. Indeed his experience as Minister of Health has given him excellent appreciation of the broader issues related to health research in Manitoba. Without the extreme day-to-day demands placed on a Minister of Health, Mr. Chomiak will be better able to interact with Council. Indeed, he has already met in an informal setting with the entire Council where a very productive exchange of viewpoints was possible. Council looks forward to many more such interactions and greatly looks forward to working with Mr. Chomiak to strengthen health research in the Province.

On a national level, MHRC continues to participate in discussions with our counterparts in other jurisdictions through the regular meetings of the National Alliance of Provincial Health Research Organizations (NAPHRO). Two meetings of NAPHRO were held this year, in Ottawa

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in October 2004 and in Saskatoon in February 2005. MHRC was represented at these meetings by our executive director, Dr. John Docherty. Topics of discussion at these meetings have included Provincial Research Ethics Boards, clinical research initiatives and research leaders management and training. With respect to clinical research initiatives, there has been a great deal of interest expressed by several other Provincial jurisdictions regarding GEREC, a clinical software platform for management of all aspects of clinical trials. The software was developed in Quebec with support from FRSQ and is widely used in that Province. Representatives from GEREQ have visited Winnipeg to describe the benefits of the software to the local clinical researchers. With respect to research leaders training, MHRC has joined with several other National and Provincial health research agencies in providing sponsorship for a workshop that will attempt to develop a program to provide training for future leaders in health research.

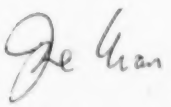
Once again the quality of the applications to MHRC's annual grants and awards competition was extremely high and, as in recent years, budget limitations meant that only those applications rated in the "excellent" category could be funded with very many in the "very good" category going unsupported. Council continues to be frustrated by the inadequacy of the budget that leads to the lack of funding for these deserving investigators and trainees. To put things in perspective, the recent $200,000 increase in the Provincial grant to MHRC finally brought the MHRC budget back to the level of the 1989–1990 fiscal year. The costs of research, including stipend and salaries, have increased substantially in the intervening 15 years. For instance, in 1989 the graduate student stipend was $12,755 ($17,000 in 2004), the postdoctoral stipend was $24,340 ($35,000 in 2004) and the average operating grant was $29,000 ($42,000 in 2004). Clearly, the 2004 budget does not go nearly as far as it did in 1989. Council strongly urges the Provincial Government to rectify this inadequacy of funding if they are serious about maintaining a vibrant health research enterprise in the Province.

One other thing that has not changed over the years is the tremendous amount of time and effort contributed by the members of the three scientific review committees that evaluate the applications submitted to the MHRC competition. On behalf of Council, I would like to extend my sincere appreciation to these individuals. Without their help, it would not be possible to conduct our grants and awards competition with such high standards of scientific review and integrity. In addition, I would also like to acknowledge the efforts of the many external reviewers whose input also helps to maintain the scientific rigour with which our competitions are conducted.

This year, I am pleased to welcome two new members of Council: Dr. Brent Schacter and Mr. Louis Barre (see their brief biographies on the following pages). They replace Dr. Suresh Mysore and Mr. Dwight Barna. I would like to take this opportunity to thank Dr. Mysore and Mr. Barna for their outstanding contributions during their tenure on Council.

On a personal note, this will be the last time I report as Chair of Council as I have stepped down from most of my administrative responsibilities to concentrate on my own research. I very much appreciate the support that all the hard working members of Council have give me over the last three years. It has also been a great pleasure to work with the MHRC staff past and present: Liz Ford, Bruce MacDonald and John Docherty. I will miss interacting with them on a regular basis.

Respectfully submitted,



Jane A. Evans PhD, FCCMG

Chairperson

NEW MEMBERS APPOINTED TO COUNCIL

Dr. Brent Schacter

Dr. Schacter is the Chief Executive Officer of the Canadian Association of Provincial Cancer Agencies (CAPCA), taking on that national role in July 2003. He was the President and Chief Executive Officer of CancerCare Manitoba in Winnipeg from January 1993 to August 2003. He is also a Professor in the Department of Internal Medicine of the University of Manitoba. He continues to practice Medical Oncology and Hematology at CancerCare Manitoba. For over 20 years, he was a Senior Scientist in the Manitoba Institute of Cell Biology, which is the basic research arm of CancerCare Manitoba. In his research role he has published 45 scientific papers and has participated in over 20 invited and guest lectureships.

Within the context of his appointment as Chief Executive Officer of CAPCA, he is a member of Board of the Canadian Association of Provincial Cancer Agencies (CAPCA). He was the co-chair of the Steering Committee of the Canadian Strategy for Cancer Control, and is now a member of the Council for the Canadian Strategy for Cancer Control (CSCC), representing CAPCA.

Dr. Schacter is currently the Chair of the Standards Action Group of the CSCC and is an Executive Member of the Research Action Group of the CSCC.

In June 2000, Dr. Schacter became a member of the Board of the National Cancer Institute of Canada, representing the Canadian Association of Provincial Cancer Agencies. He is also a member of the Steering Committee for Canadian Cancer Statistics, which is published annually by the National Cancer Institute of Canada, in collaboration with Health Canada, Statistics Canada, the Canadian Council of Cancer Registries, and the Canadian Cancer Society. Earlier, Dr. Schacter was the Scientific Officer of Grant Panel C of the National Cancer Institute of Canada in 1978 and a member of Grant Panel C of the National Cancer Institute of Canada from 1979 - 1982. Dr. Schacter represented CancerCare Manitoba on the Council of the Alliance for the Prevention of Chronic Diseases of Manitoba, and remains a member-at-large.

In his educational role, Dr. Schacter was a member of the Board of Examiners in Medical Oncology of the Royal College of Physicians and Surgeons of Canada from 1987–1993, and was Chairman of the Board of Examiners in Medical Oncology of the Royal College from 1990–1993.

He was a member of the NCI Canada Clinical Trials Group in Hematology from 1989–1995 and continues to actively participate as a clinician in the NCI Canada Clinical Trials Group. He was the counsellor for Manitoba to the Canadian Society for Clinical Investigation from 1979–1982; a member of the Awards Committee from 1980–1982 and Chairman of the Awards Committee of the Canadian Society for Clinical Investigation (1981/82).

In addition to a panoply of Supervisory and committee roles within CancerCare Manitoba and the Winnipeg Regional Health Authority, Dr. Schacter's external service also includes serving presently as the President of the Winnipeg Chapter of the Canadian Friends of the Hebrew University and on the National Board of the Canadian Friends of the Hebrew University.

Mr. Louis Barre, M.S.A.

Louis Barre is currently the Director of Health Information Management for Manitoba Health, with lead responsibility for health information policy, departmental data production and analyses, Ministerial reporting, and the department's research related activities. He has worked extensively with the Manitoba Centre for Health Policy, Canadian Institute for Health Information, Statistics Canada, Canadian Institutes for Health Research and other data and research organizations. His previous roles include Chief Information Officer for Manitoba Health, Senior Policy Analyst to the Minister of Health, and Manager of Work Systems with responsibility for a range of planning and restructuring activities. Mr. Barre has been a member of many health system improvement teams, most recently related to the issue of waiting lists. He recently chaired the Federal-Provincial-Territorial Performance Reporting Technical Working Group to the Advisory Committee on Governance & Accountability, which established a national plan for comparable indicator reporting under the First Ministers Health Accord.

Dr. Ka Wai Au Yeung

Regulation of monocyte chemoattractant protein-1 expression in hyperhomocyssteinemia: Possible involvement of NADPH oxidase.

Supervisor: Dr. Karmin O, Departments of Animal Science and Physiology, University of Manitoba and National Centre for Agri-Food Research in Medicine.

Elevated plasma levels of homocysteine, hyperhomocysteinemia, is now regarded as one of the major risk factors for atherosclerosis. There are several plausible underlying mechanisms of homocysteine-induced atherosclerosis, including endothelial dysfunction, increased proliferation of smooth muscle cells, platelet activation as well as increased cholesterol synthesis in the liver. The infiltration of monocytes into the injured arterial wall followed by differentiation into macrophages is one of the essential features of atherosclerosis. Monocyte chemoattractant protein-1 (MCP–1) is a potent chemokine involved in monocyte infiltration in the development of atherosclerosis. The adhered monocytes/macrophages and endothelial cells are the major sources of MCP-1 in the atherosclerotic lesion.

Dr. Au Yeung proposes to study the mechanisms responsible for the regulation of MCP-1 formation. It is anticipated that better understanding of the exact mechanisms of homocysteine-stimulated chemokine expression will provide researchers with therapeutic targets for prevention and treatment of cardiovascular disorders.

Dr. Au Yeung was awarded a BSc in chemistry from the University of Hong Kong and then went on to complete masters and PhD degrees in pharmacology, also at the University of Hong Kong. Dr. Au Yeung started her postdoctoral training in Dr. O's laboratory in February 2004.

Dr. Shaohong Cheng

Establishing the role of Dlx1 and Dlx2 in forebrain development, using a conditional double knockout mouse model, and its implication for autism research.

Advisor – Dr. David Eisenstat, Manitoba Institute of Cell Biology, CancerCare Manitoba.

Autism is a neurodevelopmental disorder with severe impairment of social, communicative, cognitive and behavioural functions. Recent studies reveal that the prevalence of autistic children is about 3/1000 and the incidence of autism is progressively increasing. Despite its high prevalence, the cause of autism is still unknown, due to our limited knowledge of brain development and function, and the complex etiology of autism. A range of treatments, however, such as behavioural interventions, complementary and alternative medications, etc., have been used by families with autistic individuals and have been shown to be effective broadly. Thus, it is timely to investigate both the pathological basis, as well as define specific treatment of autism. This task will be greatly facilitated by having appropriate animal models of autism. Dr. Cheng will undertake a series of studies designed to develop and validate such a model.

Although as many as 15 – 20 genes have been implicated in the inheritance of autism, many lines of evidence suggest that down regulation of the signaling by the neurotransmitter Gamma Amino Butyric Acid (GABA) might be one major form of pathology underlying autism. GABAergic neuronal differentiation is controlled by specific genes, known as Dlx homeobox genes, during embryogenesis. Dr. Cheng therefore proposes to develop a Dlx1/Dlx2 conditional double knockout mouse specific to the forebrain as a potential model for autism.

Dr. Shaohong Cheng received her BSc in biology from Huazhong University of Science and Technology, China and a PhD in developmental biology from the department of zoology, University of Manitoba.

Dr. Florent Hube

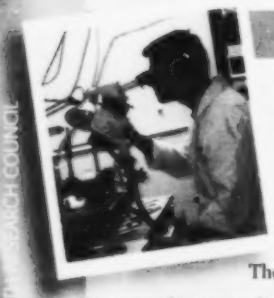
In vivo detection of hSBEM, a new putative marker for breast cancer.

Advisors – Drs Yvonne Myal and Etienne Leygue, Departments of Pathology and Biochemistry and Medical Genetics, University of Manitoba.

Breast cancer is one of the most frequently diagnosed cancers today. An estimated 1,000,000 cases of breast cancer are detected each year worldwide and in Canada alone approximately 21,200 women will be diagnosed with breast cancer in 2003. Despite such striking statistics, breast cancer related mortality is slowly decreasing as continuing research has led to earlier detection and more treatment options for breast cancer patients. Early detection, enabling intervention at a localized and potentially curable stage, remains a central goal in breast cancer treatment. Several breast tumour markers have been identified as putative markers to diagnose and manage breast cancer patients, but unfortunately, none of them are breast specific and only help to identify a small subset of patients. There is therefore an urgent need to identify novel genes whose expression is limited to the mammary epithelium. Recent work by Drs Myal and Leygue has led to the identification of such a putative marker that they have termed human small breast epithelial mucin (hSBEM). Dr. Hube will perform studies designed to develop a non-invasive strategy for the in vivo detection of hSEBM protein using an experimental mouse breast tumour model.

This research has the potential to establish hSEBM as a powerful clinical tool for the early detection of breast cancer with resultant optimization of therapy.

Dr. Florent Hube received his master's degree in biochemistry from the University of Tours, France and his DEA (predoctoral training) at the University of Paris and Institut National des Sciences et Techniques Nucleaires, Paris. Dr. Hube was awarded a PhD in molecular and cellular biology from the University of Paris 7, France and arrived in Manitoba to commence postdoctoral studies in November 2003.



Dr. Tanguy Marqueste

Dr. Tanguy Marqueste. Effects of altered neuromuscular activity on gene exoptression in rat alpha motoneurons.

Advisor – Dr. Phillip Gardiner, Department of Physiology, University of Manitoba.

The alpha-motoneuron plays an important role in converting nerve signals into patterns of impulses to excite muscle fibres. A variety of ionic conductance channels are responsible for these properties of the alpha-motoneurons. Previous work from Dr. Gardiner's laboratory suggests that altered physical activity levels may result in changes in these motoneuron ion channels, very likely as a result of changes in the expression of genes that code for these ion channel proteins. Currently, very little is known about variability in gene expression among alpha-motoneurons with different functions, and virtually nothing is known concerning how motoneuronal gene expression responds to alterations in chronic activity. Dr. Tanguy Marqueste proposes to address this issue in a series of studies involving increases and decreases in chronic neuromuscular activity. Additional studies will investigate the effects of both acute and chronic changes in neuromuscular activation on the expression of these genes in alpha-motoneurons.

The results of these studies will have an impact on our understanding of the role of physical activity in altering gene expression and function of nerves and nervous circuits. This will in turn impact on the use of physical activity as a preventative and therapeutic modality in cases where nervous system function is compromised, such as aging, cerebrovascular accidents and trauma, spinal cord and peripheral nerve injuries and disease.

Dr. Tanguy Marqueste undertook studies towards his DEUG, Licence and Maitrise at the University of Aix-Marseille III, France. Following completion of his Teacher designation in biotechnology at the University of Lyon, Tanguy completed his DEA and PhD in Human Movement Science at the University of Aix-Marseille II, France. Dr. Marqueste joined Dr. Gardiner's laboratory at the University of Manitoba in 2003.

Dr. Treena Orchard

The sickness of stigma: Examining the health outcomes of AIDS stigma for female sex workers in Karnataka, India.

Advisor – Dr. Jamie Blanchard, Department of Community Health Sciences, University of Manitoba.

My academic training began at the University of Saskatchewan, where I received a B.A. in history (1994) and an honours certificate in anthropology (1996). I pursued my Master's degree in anthropology (1998) at Memorial University of Newfoundland, which focused on the adolescent experience among the Naskapi peoples of northern Quebec. In 1999 I began my Ph.D. in anthropology at the University of Manitoba, graduating in 2004. Based on over a year of fieldwork, my dissertation examines the issues of coming of age, sexuality and relationships, social reform, and HIV/AIDS among a group of female sex workers in rural south India. I am currently a post-doctoral fellow in the department of Community Health Sciences, under the guidance of Dr. James Blanchard.

I have participated in a variety of interdisciplinary research projects over the course of my doctoral program, covering such diverse topics as Aboriginal women's cancer experiences, teenage motherhood and body image, HIV/AIDS among inner-city men and women, street youth and sexually-transmitted diseases, and the integration of traditional and western medical systems in South America. My current research interests are child prostitution and the health outcomes of HIV/AIDS-related stigma for female prostitutes in south-India. I am also in the process of adapting my thesis into manuscript form for publication.

Dr. Joelle Ruthig

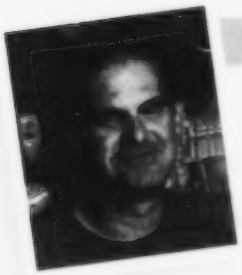
Dr. Joelle Ruthig. Perceived control and optimism: Implications for health and survival.

Advisor – Dr. Judy Chipperfield, Laboratory of Aging and Health Research; Health, Leisure and Human Performance Research Institute, University of Manitoba.

As individuals age, they face an increased risk of suffering various health problems such as strokes or hip fractures. Thus, certain age-related health problems become more salient as older individuals witness peers, neighbours, or even spouses suffer such health problems. Consequently, it is likely that they at least occasionally contemplate their own risk of suffering similar health problems, resigning themselves to wait for the health problem to occur. Because such feelings of helplessness have been linked to poorer physical health, excessive worrying about potential health problems may cause a decline in physical health without the health problem ever occurring.

The main goal of Dr. Ruthig's research is to consider whether health risk assessments have health implications for older adults. Key psychological factors that can also offset feelings of vulnerability, namely perceived control and optimism, will also be considered as they interact with risk assessments to predict health (e.g. self reported physical health), health service use (e.g. physician visits, hospitalizations) and survival. Perceived control is the subjective capacity to influence life events and can act as a buffer against various health problems. If individuals believe that preventing certain health problems lies within their control, they may then feel less at risk of suffering those health problems compared to individuals with lower perceived control and this may have subsequent health implications.

Dr. Joelle Ruthig received a BA in psychology from the University of Manitoba and then went on to complete a Masters and PhD in social psychology, also at the University of Manitoba.



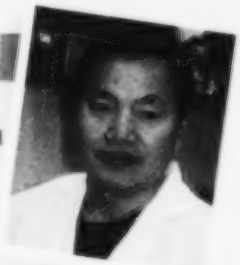
Dr. George Skliris

Dr George Skliris. Is estrogen receptor beta down regulated in human breast cancers due to promoter DNA hypermethylation and/or histone deacetylation?

Advisor – Dr Leigh Murphy, Manitoba Institute of Cell Biology, CancerCare Manitoba.

Steroid hormones, especially estrogens are tumour promoters and linked to breast carcinogenesis. Estrogen action is mediated by two distinct intracellular estrogen receptors, ERa and ERb. Although Era is the better characterised ER and is widely used in a clinical setting to predict which breast cancer patients will benefit from hormone therapy, the role of ERb remains elusive. Previous studies, including some by Dr Skliris, demonstrated that there is a decrease in the level of ERb protein not only from normal to pre- invasive lesions but also in different histological types of invasive and metastatic cancers. These, and other, observations led to the suggestion that ERb might have a protective role, acting as a tumour suppressor while its loss might promote breast carcinogenesis. Dr Skliris will investigate potential mechanisms by which ERb levels might be suppressed in breast tumours paying particular attention to DNA methylation and histone deacetylation. Since both of these potential mechanisms for ERb down regulation are reversible improved understanding of the ERb function may provide novel strategies for the clinical management of breast cancer.

Dr George Skliris, completed a BSc in biology at the Aristotle University of Thessaloniki, Greece and then was awarded masters and PhD degrees from the University of Stirling, Scotland. Following initial postdoctoral studies in the Breast Cancer Research Group at the St James University Hospital in Leeds, England, Dr Skliris joined Dr Murphy's laboratory at the University of Manitoba in September 2003.



Dr. Zengfeng Zhang

Dr. Zhengfeng Zhang. Protective effects of lentiviral BNIP3 shRNA on atypical neuronal apoptosis.

Advisor – Dr. Jiming Kong, Department of Anatomy and Cell Science, University of Manitoba.

Neuronal cell death in neurodegenerative diseases occurs through diverse mechanisms including apoptosis, necrosis and necrosis-like apoptosis (so called atypical apoptosis). Necrosis is thought to be a genetically unregulated process that occurs in response to toxins and physical injuries. In contrast, apoptotic neuronal cell death is a highly regulated genetic program that results in the activation of a specific family of proteases known as caspases. Unlike apoptosis that involves mitochondrial release of cytochrome c and subsequent activation of caspases, atypical apoptotic neuronal cell death may be independent of caspase activation and mediated through alternate pathways. These atypical apoptotic cell death pathways have been widely observed in neurodegenerative disorders such as excitotoxity, ischemia/hypoxia (e.g. stroke), Huntington's disease, Alzheimer's disease and amyotrophic lateral sclerosis (ALS).

Dr. Zhengfeng Zhang is investigating the role of the mitochondrial protein BNIP3 in atypical neuronal apoptosis. He will utilize the extremely novel and exciting technique of RNA interference. In particular, Dr. Zhang will study the neuroprotective properties of specific short hairpin RNAs that are capable of almost complete inhibition of BNIP3 expression. These studies will greatly expand our knowledge of the mechanisms of neuronal cell death applicable to a variety of neurodegenerative diseases, with the potential for new therapeutic approaches to these diseases.

Dr. Zhengfang Zhang received his MD from The North Sichuan University, Sichuan, China followed by Masters and PhD degrees from the Third Military Medical University, Chongqing, China. He has been a postdoctoral fellow in the laboratory of Dr. Jiming Kong in the Department of Anatomy and Cell Science, University of Manitoba since December 2003.

PURPOSE AND OVERVIEW OF PROGRAMS

Established by an Act of the Legislature June 30, 1982 to promote and assist basic, clinical and applied research in the health sciences in Manitoba and advise the Minister on health research matters referred to Council.

Core Programs: These programs have been funded by grants from the Government of Manitoba. Funding for 2004/05 was $1,952,600 from the Department of Energy, Science and Technology budget.

Partnership Programs: The program provides partnership awards (matching funds) to individuals who have been awarded Canadian Institutes of Health Research Regional Partnership Program (CIHR-RPP) operating grants or personnel awards. Funding for this program is made available through the Department of Energy, Science and Technology.

Establishment Grants: Establishment Grants are provided to recently recruited faculty members, who show exceptional promise, to focus on establishing their research programs. The awards, for up to $100,000 to be used within a 3-year period, provide support for a variety of purposes, e.g., buy-out of teaching time, salary for research personnel (other than the applicant's salary), purchase of equipment and supplies, etc. Council will only consider applications from individuals who have held an academic appointment in the Province of Manitoba for no more than 4 years.

Operating Grants: Investigators who hold an academic appointment at the Assistant Professor (or equivalent) rank or above in the Province for a period of not more than five years are eligible to apply. Operating grants are designed to defray the normal costs of research. Grants are awarded for either one or two years.

Postdoctoral Fellowships: A limited number of fellowships are available to qualified candidates with a doctoral degree whose prior postdoctoral research training normally does not exceed 3 years.

Graduate Studentships: A limited number of studentships are offered to qualified graduate students who are undertaking full-time Master's or Doctoral programs in the Province of Manitoba. However, in disciplines where training at the doctoral level is not available within the Province, Council will consider funding elsewhere if documented evidence is provided confirming the unavailability of Provincial training opportunities, a need in Manitoba for individuals with the training and a firm intent to return to the Province after training.

PhD Dissertation Awards: Dissertation awards are provided to students enrolled in a PhD program in population health or health-related social sciences in Manitoba who have completed all relevant course work and whose dissertation proposal has been approved by their PhD Advisory Committees. The awards, for up to $5,000, are to be used to cover costs incurred in the conduct of the students' dissertation research.

Bridge Funding: Bridge funding awards are once only, one-year awards designed to allow experienced, productive investigators, who have lost funding from a major national agency, to maintain their research operation while they attempt to regain national funding.

PURPOSE AND OVERVIEW OF PROGRAMS

1. PURPOSE

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OPERATING & ESTABLISHMENT GRANTS

NEW ESTABLISHMENT GRANTS

Recipient, Department, Institution.	Amount
Ding, Hao, Department of Biochemistry & Medical Genetics, University of Manitoba. **Title:** Transgenic modeling of development and disease: Establishment of a gene-targeting program.	$38,784
Kong, Jiming, Department of Human Anatomy & Cell Science, University of Manitoba. **Title:** Atypical neuronal apoptosis in neurodegenerative diseases.	$37,157
Lobchuk, Michelle, Faculty of Nursing, University of Manitoba. **Title:** A series of studies that contribute toward building a theory-based intervention to enhance family caregive communication competence in the monitoring and interpreting of cancer patient symptom experiences.	$30,590
Los, Marek, Manitoba Institute of Cell Biology, CancerCare Manitoba. **Title:** New approaches to cancer therapy and precise monitoring of cancer treatment.	$45,640
Moghadasian, Mohammed, Department of Human Nutritional Sciences, St. Boniface Hospital Research Centre. **Title:** Understanding the mechanisms by which allo-immune conditions and hypercholesterolemia accelerate coronary atherosclerosis after heart transplantation.	$29,831
Uzonna, Jude, Department of Immunology, University of Manitoba. **Title:** Cellular mechanisms by which persistent parasites mediate lasting immunity and assess the use of these avirulent parasites as live attenuated vaccine against leishmaniasis.	$42,000
Xie, Jiuyong, Department of Physiology, University of Manitoba. **Title:** Alternative pre-mRNA splicing: a widespread and essential way of gene expression regulation but with largely unclear molecular basis of its control by cell signals.	$64,000
TOTAL	**$288,002**

ESTABLISHMENT GRANT RENEWALS

Recipient, Department, Institution.	Amount
Glazner, Gordon W., Department of Pharmacology, St. Boniface Hospital Research Centre. **Title:** ER-mediated signal transduction events, including modulation of amyloid beta production, ER stress signals and discovery of novel ER-mediated messengers.	$50,000
Halas, Joannie, Faculty of Physical Education & Recreation Studies, University of Manitoba. **Title:** The impact of the quality and cultural relevance of physical education on the health and well-being of children and youth with a particular focus on aboriginal youth.	$21,539
Netticadan, Thomas , Institute of Cardiovascular Sciences, St. BonifaceHospital Research Centre. **Title:** The mechanisms underlying contractile dysfunction in heart failure.	$26,550

O, Karmin, National Centre for Agri-food Research in Medicine, St. Boniface Hospital Research Centre. **Title:** Neutraceuticals and Functional Foods in Health	$42,000
Sareen, Jitender, Department of Psychiatry, University of Manitoba. **Title:** Population based approaches to mental health services utilization and psychiatric comorbidity.	$25,873
Soussi Gounni, Abdelilah, Department of Immunology, Faculty of Medicine, University of Manitoba. **Title:** Neutrophils contribute to chronic inflammation that characterise the asthmatic state.	$28,876
Wigle, Jeffrey T., Division of Stroke & Vascular Disease, St. Boniface Hospital Research Centre. **Title:** How homeobox transcription factors regulate the growth and differentiation of the blood and lymphatic vasculature system during embryonic development and disease progression.	$35,400
Woodgate, Roberta L. Faculty of Nursing, University of Manitoba. **Title:** Improving the health and quality of life in children who experience illness and/or disability.	$17,310
Zhang, Shetuan, Institute of Cardiovascular Sciences, St. Boniface Hospital Research Centre. **Title:** Molecular mechanisms of ion channel function and heart disease.	$8,000
TOTAL	**$255,548**

NEW OPERATING GRANTS

Recipient, Department, Institution.	**Amount**
Ding, Hao, Department of Biochemistry & Medical Genetics, University of Manitoba. **Title:** The role of a novel regulator of telomere length (RTEL)in the development of astrocytoma.	$57,617
Fedirchuk, Brent, Department of Physiology, University of Manitoba. **Title:** Investigation of the mechanisms facilitating activation of spinal motoneurons.	$55,000
Soussi Gounni, Abdelilah, Department of Immunology, University of Manitoba. **Title:** Moledular mechanism of IL-9 mediated ASM cells activation.	$55,000
Wigle, Jeffrey, Division of Stroke and Vascular Disease, St. Boniface Hospital Research Centre. **Title:** Prox1 transcriptional regulation of lymphatic development.	$60,860
Xie, Jiuyong, Department of Physiology, University of Manitoba. **Title:** Regulation of the alternative pre-mRNA splicing of the STREX exon by protein kinase A.	$55,500
TOTAL	**$283,977**

OPERATING GRANT RENEWALS

Recipient, Department, Institution.	Amount
Jakobson, Lorna S., Department of Psychology, University of Manitoba. **Title:** Understanding attentional difficulties in extremely premature children.	$19,874
Kong, Jiming, Department of Anatomy & Cell Science, University of Manitoba. **Title:** Motor neuron death in amyotrophic laterla sclerosis: Role of BNIP3.	$55,400
Mayne, Michael, Department of Pharmacology & Therapeutics, St. Boniface Hospital Research Centre **Title:** Role of ryanodine receptors in Alzheimer's disease.	$50,390
O, Karmin, Agri-food Research in Medicine, St. Boniface Hospital Research Centre. **Title:** Mechanisms of homocysteine-induced nuclear factor kappa-B activation in endothelial cells.	$51,500
Porter, Michelle M., Faculty of Physical Education & Recreation Studies, University of Manitoba. **Title:** An evaluation of the 55 Alive Driving Program with an added road test video feedback component.	$53,422
Sareen, Jitender, Department of Psychiatry, University of Manitoba. **Title:** Correlates of Mental Health Services Utilization and Distress in a Canadian community survey.	$14,738
TOTAL	**$245,324**

NEW BRIDGE FUNDING AWARD

Recipient, Department, Institution.	Amount
Bose, Ratna, Department of Pharmacology & Therapeutics,University of Manitoba. **Title:** Platelet hyperactivity in Diabetes Mellitus-effect of hyperglycemia.	$13,000
TOTAL	**$13,000**

REGIONAL PARTNERSHIPS PROGRAM GRANTS

SALARY AWARD

Recipient, Department, Institution.	Amount
Hatch Grant, Department of Pharmacology & Therapeutics, University of Manitoba. Salary award.	$38,500
TOTAL	**$38,500**

OPERATING GRANTS

Recipient, Department, Institution.	Amount
Fernyhough, Paul, Division of Neuroscience Research, St. Boniface Hospital Research Centre. **Title:** Mechanisms of impaired AKT signaling and associated motochondrial dysfunction in sensory neurons in diabetic neuropathy.	$52,002
Friel, James K., Department of Human Nutritional Sciences, University of Manitoba. **Title:** Human milk protects the premature infant.	$61,213
Gough, Kathleen M., Department of Chemistry, University of Manitoba. **Title:** IR and raman microspectroscopy of molecular changes in Alzheimer's diseased brain.	$40,590
Hryshko, Larry V., Department of Physiology, St. Boniface Hospital Research Centre. **Title:** Na-Ca exchange regulation under physiological conditions.	$42,400
Kardami, Elisavet, Department of Human Anatomy & Cell Science, St. Boniface Hospital Research Centre. **Title:** GFG-2 isoforms in cardiac repair, hypertrophy and failure.	$49,534
Kung, Sam K.P., Department of Immunology, University of Manitoba. **Title:** Defining tolerogenic antigen presenting cells.	$45,624
Murphy, Liam J., Department of Physiology, University of Manitoba. **Title:** The role of growth hormone, the IGF's and their binding proteins in growth development.	$58,650
TOTAL	**$350,013**

PERSONNEL AWARDS

NEW POSTDOCTORAL FELLOWSHIP AWARDS

Recipient (Supervisor) Department, Institution.	Amount
Au Yeung, Ka Wai (Dr. Karmin O) Department of Physiology, St. Boniface Hospital Research Centre. **Title:** Regulation of monocyte chemoattractant protein-1 expression in hyperhomocysteinemia: Possible involvement of NADPH oxidase.	$35,000
Cheng, Shaohong (Dr. David D. Eisenstat) Manitoba Institute of Cell Biology, CancerCare Manitoba. **Title:** The role of Dlx1 and Dlx2 in forebrain development.	$35,000
Hube, Florent (Drs. Yvonne Myal & Etienne Leygue) Department of Pathology, University of Manitoba. **Title:** In vivo detection of hSBEM, a new putative marker for breast cancer.	$35,000

Marqueste, Tanguy (Dr. Phillip Gardiner) Department of Physiology, University of Manitoba.
Title: Effects of altered neuromuscular activity on gene expression in rat alpha-motoneurones. $35,000

Orchard, Treena (Dr. James Blanchard) Department of Anthropology, University of Manitoba.
Title: The sickness of stigma: Examining the health outcomes of AIDS stigma for female sex workers in Karnataka, India. $35,000

Ruthig, Joelle (Dr. Judy Chipperfield) Department of Psychology, University of Manitoba.
Title: Perceived control and optimism: Implications for health and survival. $35,000

Skliris, George (Dr. Leigh C. Murphy) Manitoba Institute of Cell Biology, CancerCare Manitoba.
Title: Is estrogen receptor beta (Erb) down-regulated in human breast cancers due to promoter DNA hypermethylation and/or histone deacetylation? $35,000

Zhang, Zhengfeng (Dr. Jiming Kong) Department of Human Anatomy & Cell Science, University of Manitoba.
Title: Protective effects of lentiviral BNIP3 shRNA on atypical neuronal apoptosis. $35,000

Travel $12,000

TOTAL **$292,000**

FELLOWSHIP RENEWAL AWARD

Recipient (Supervisor) Department, Institution. **Amount**

Asemu, Girma , (Dr. P.S. Tappia) Institute of Cardiovascular Sciences,St. Boniface Hospital Research Centre.
Title: Mechanisms of carcolemmal phospholipase C isozymes-mediated signaling in ischemia-reperfused heart. $35,000

Campbell, Darren Wade, (Drs. Martin P. Paulus & Jeffrey P. Reiss) Department of Psychology, University of Manitoba.
Title: Habituation and sensitization of fMRI neural responses to emotional faces in patients with social anxiety disorder or schizophrenia. $35,000

Xue, Mengzhou , (Dr. Marc Del Bigio) Department of Pathology, University of Manitoba.
Title: Hemorrhage in the immature brain - role in potentiation of brain injury. $35,000

Travel $4,500

TOTAL **$109,500**

TRAVEL AWARD FOR EXCELLENCE IN POSTDOCTORAL RESEARCH

Postdoctoral Fellowship – Research Poster Presentation Award

Sponsorship of the Manitoba Health Research Council Post Doctoral Research Poster Presentation Award as part of the 2005 Canadian Student Health Research Forum. Dr. Muhammad Shahidur Rahman	$2,500.00
TOTAL	**$2,500.00**

NEW STUDENTSHIP AWARDS

Recipient (Supervisor) Department, Institution.	**Amount**
Betker, Aimee (Drs Z. Moussavi & Szturm) Department of Electrical Engineering/Med. Rehab. University of Manitoba. **Title:** Patient fall risk and prevention: Investigating multifactorial postural control models.	$17,000
Cherlet, Tracy (Dr. L.C. Murphy) Department of Biochemistry & Medical Genetics, University of Manitoba. **Title:** Interaction between TGF-beta and ER involves AP1 factors.	$17,000
Chooniedass-Kothari, Shilpa (Dr. Etienne Leygue) Department of Biochemistry & Medical Genetics, University of Manitoba. **Title:** The role of SRA protein in modulating steroid receptors activity.	$17,000
Dent, Melissa (Dr. Paramjit S. Tappia) Institute of Cardiovascular Sciences, St. Boniface Hospital Research Centre. **Title:** Physiology and nutrition.	$17,000
Elliott, Alison (Dr. Jane Evans) Department of Biochemistry & Medical Genetics, University of Manitoba. **Title:** Dysmorphology-Genotype-Phenotype correlation in split hand foot syndromes.	$17,000
Frosk, Patrick (Dr. Klaus Wrogemann) Department of Biochemistry & Medical Genetics, University of Manitoba. **Title:** Characterizationof the Limb Girdle Muscular Dystrophy type 2H(LGMD2H) gene product, TRIM32.	$17,000
Haynes, Tara (Dr. Raymond P. Perry) Department of Psychology, University of Manitoba. **Title:** Secondary Control: Implications for health and well-being.	$17,000
Hinds, Aynslie (Dr. Lisa Lix) Department of Community Health Sciences, University of Manitoba. **Title:** Individual and community determinants of mental health service use in Manitoba.	$17,000
Howie, Rosemarie (Dr. Michelle Alfa) Department of Medical Microbiology, University of Manitoba. **Title:** Modeling microbial survival in build-up biofilm for complex medical devices.	$17,000
Ji, Hezhao (Dr. Francis A. Plummer) Department of Medical Microbiology, University of Manitoba. **Title:** The association of novel IRF-1 polymorphisms with resistance to HIV-1 infection in Kenyan female sex workers.	$17,000

Khan, Osaama (Dr. Marc Del Bigio) Department of Pathology, University of Manitoba.
Title: Effects of white matter hypoxia in neonatal rat hydrocephalus. $17,000

Law, Warren (Dr. Geoff Hicks) Department of Biochemistry & Medical Genetics, Faculty of Medicine, CancerCare Manitoba.
Title: TLS proto-oncoprotein modulates NF-kB-directed gene expression. $17,000

Liu, Jun (Dr. Larry M. Jordan) Department of Physiology, University of Manitoba.
Title: Control of motoneuron activity during locomotion. $17,000

Martin, Dianna (Dr. B. Triggs-Raine) Department of Biochemistry & Medical Genetics, University of Manitoba.
Title: The role of Hyal 1 in hyaluronan degradation. $17,000

Olfrey, Tracie (Dr. Brian Cox) Department of Community Health Sciences, University of Manitoba.
Title: Determinants of mental health in Canadian children and adolescents. $17,000

Olson, Carl (Dr. James I. Nagy) Department of Physiology, University of Manitoba.
Title: Connexins and gap junctions forming electrical synapses in the mammalian CNS. $17,000

Oyugi, Julius (Dr. Keith R. Fowke) Department of Medical Microbiology, Faculty of Medicine, University of Manitoba
Title: CD4 polymorphism and its effect on HIV-1 infectivity. $17,000

Peeler, Jason (Dr. Judy Anderson) Department of Human Anatomy & Cell Science, University of Manitoba.
Title: Functional parameters associated with patellofemoral joint pain. $17,000

Qiu, Hongyu (Dr. Xi Yang) Department of Medical Microbiology, Faculty of Medicine, University of Manitoba.
Title: The role of dendritic cells in directing T cell cytokine patterns following chlamydial infection. $17,000

Sankaran, Deepa (Dr. Harold M. Aukema) Department of Human Nutritional Sciences, University of Manitoba.
Title: Effects of dietary fat on the progression of early renal disease in rodent models. $17,000

Safronetz, David (Dr. Michael Drebot) Department of Medical Microbiology, Canadian Science Centre for Human & Animal Health.
Title: Pathogenesis and transmission characteristics of hantavirus infections. $17,000

Taylor, Nicole (Dr. L. Jakobson) Department of Psychology, University of Manitoba.
Title: Development of visual action coding systems in full-term and pre-term preschoolers. $17,000

Thompson, Genevieve (Dr. Verena Menec) Department of Community Health Sciences, University of Manitoba.
Title: Developing quality indicators for end-of-like care in chronic illness. $17,000

Wilkins, Krista (Dr. Roberta Woodgate) , Faculty of Nursing University of Manitoba.
Title: Siblings of children with Leukemia: Their perceptions of Transitions. $17,000

Yang, Xiaoyang (Dr. Peter A. Cattini) Department of Physiology, University of Manitoba.
Title: Regulation of the human growth hormone gene through chromatin remodeling. $17,000

TOTAL **$425,000**

STUDENTSHIP RENEWAL AWARDS

Recipient (Supervisor) Department, Institution.	Amount
Bay, Denise (Dr. Deborah A. Court), Department of Microbiology, University of Manitoba. **Title:** Structural studies on mitochondrial porins.	$17,000
Douville, Renee (Dr. Kent T. HayGlass) Department of Immunology, University of Manitoba. **Title:** Respiratory virus specific immune responses in a human population.	$17,000
Friesen [illegible]ona , (Dr. Jeffery Wigle) Department of Biochemistry & Medical Genetics, St. Boniface Hospital Research Centre. **Title:** Ca[illegible]iovascular development and disease.	$17,000
Jeyaraman, Madhumathy , (Dr. Elissavet Kardami) Department of Physiology, St. Boniface Hospital Research Centre. **Title:** The role and fate of Connexin-43 in cardiac injury and cardioprotection.	$17,000
Mendoza, Francisco J. (Dr. Spencer Gibson), Manitoba Institute of Cell Biology, CancerCare Manitoba. **Title:** The role of MEKK1 in Apoptosis.	$17,000
Ng, Carmina , (Dr. Joannie Halas) Faculty of Physical Education & Recreation Studies, University of Manitoba. **Title:** The use of breath sounds to monitor exercise intensity.	$17,000
Piotrowski, Andrea S., (Dr. L. Jakobson) Department of Psychology, University of Manitoba. **Title:** Action coding systems in the brain; effects of normal aging and dementia.	$17,000
Volk, Jennifer , (Dr. Judy Chipperfield) Department of Psychology, University of Manitoba. **Title:** Perceived control, health and aging.	$17,000
Wood, Linda P., (Dr. Shiva S. Halli) Department of Community Health Sciences, University of Manitoba. **Title:** The help-seeking behaviour of battered immigrant women.	$17,000
TOTAL	**$153,000**

Dissertation Awards

Recipient (Supervisor) Department, Institution.	Amount
Bodnarchuk, Jennifer (Dr. Warren Eaton) Department of Psychology, University of Manitoba. **Title:** The breastfeeding triangle: Breastfeeding, crawling and cognition.	$5,000
Peeler, Jason (Dr. Judy Anderson) Department of Human Anatomy & Cell Science, University of Manitoba. **Title:** Functional parameters associated with patellofemoral joint pain.	$5,000
TOTAL	**$10,000**

2004 OPERATING GRANTS REVIEW COMMITTEE

From left to right: Dr. Teresa Dekievit, Dr. Harold Aukema, Dr. Rachael Scarth, Dr. James Gilchrist, Dr. Jeff Wigle, Dr. Spencer Gibson (Chair), Dr. Etienne Leygue, Dr. David Moore, Dr. Grant Hatch, Dr. Steve Jones and Dr. Archie McNicol

Dr. Spencer Gibson, Chair, Department of Biochemistry and Medical Genetics, Faculty of Medicine, *University of Manitoba*
Dr. Harold Aukema, Department of Human Nutritional Sciences, Faculty of Human Ecology, *University of Manitoba*
Dr. Steve Jones, Canadian Science Centre for Human and Animal Health
Dr. Teresa Dekievit, Department of Microbiology, Faculty of Science, *University of Manitoba*
Dr. James Gilchrist, Department of Oral Biology, Faculty of Dentistry, *University of Manitoba*
Dr. Grant Hatch, Department of Pharmacology & Therapeutics, Faculty of Medicine, *University of Manitoba*
Dr. Etienne Leygue, Department of Biochemistry and Medical Genetics, Faculty of Medicine, *University of Manitoba*
Dr. Archie McNicol, Department of Oral Biology, Faculty of Dentistry, *University of Manitoba*
Dr. David Moore, Department of Internal Medicine, Faculty of Medicine, *University of Manitoba*
Dr. Rachael Scarth, Faculty of Agriculture and Food Science, *University of Manitoba*
Dr. Jeff Wigle, Department of Biochemistry and Medical Genetics, Faculty of Medicine, *University of Manitoba*

2004 PERSONNEL REVIEW COMMITTEE

From left to right: Dr. Fiona Parkinson, Dr. Karmin O, Dr. Jim House, Dr. Alberto Civetta, Dr. Kathleen Gough, Dr. Gary Glavin (Chair), Dr. Kevin Coombs, Dr. David Merz, Dr. Peter Watson, Dr. Gunner Valdimarsson and Dr. David Eisenstat

Dr. Gary Glavin, Chair, Department of Pharmacology, Faculty of Medicine, *Canadian Science Centre for Human and Animal Health*
Dr. Alberto Civetta, Department of Biology, *University of Winnipeg*
Dr. Kevin Coombs, Department of Medical Microbiology, Faculty of Medicine, *University of Manitoba*
Dr. David Eisenstat, CancerCare Manitoba, *Health Sciences Centre*
Dr. Kathleen Gough, Department of Chemistry, Faculty of Science, *University of Manitoba*
Dr. Jim House, Faculty of Agriculture and Food Sciences, *University of Manitoba*
Dr. David Merz, Department of Biochemistry and Medical Genetics, Faculty of Medicine, *University of Manitoba*
Dr. Karmin O, Departments of Animal Science and Physiology, Faculty of Science, *University of Manitoba*
Dr. Fiona Parkinson, Department of Pharmacology, Faculty of Medicine, *University of Manitoba*
Dr. Gunner Valdimarsson, Department of Zoology, Faculty of Science, *University of Manitoba*
Dr. Peter Watson, Department of Pathology, Faculty of Medicine, *University of Manitoba*

2004 SOCIAL/POPULATION HEALTH REVIEW COMMITTEE

From left to right: Dr. Yoshi Iwasaki, Dr. Andrea Kilgour, Dr. Jeff Sisler, Dr. Anita Kozyrskyj, Dr. Alan Katz, Dr. Sharon Bruce (Chair), Dr. Emily Etcheverry, Dr. Judy Chipperfield and Dr. Diana Clarke (missing from photo – Dr. Susan McClement)

Dr. Sharon Bruce, Chair, Department of Community Health Sciences, Faculty of Medicine, *University of Manitoba*
Dr. Judy Chipperfield, Faculty of Physical Education, *University of Manitoba*
Dr. Diana Clarke, Department of Psychiatry, Faculty of Medicine, *University of Manitoba*
Dr. Emily Etcheverry, Department of Medical Rehabilitation, Faculty of Medicine, *University of Manitoba*
Dr. Yoshi Iwasaki, Faculty of Physical Education, *University of Manitoba*
Dr. Alan Katz, Department of Family Medicine, Faculty of Medicine, *University of Manitoba*
Dr. Andrea Kilgour, Department of Clinical Health Psychology, Faculty of Medicine, *University of Manitoba*
Dr. Anita Kozyrskyj, Department of Community Health Sciences, Faculty of Medicine, *University of Manitoba*
Dr. Susan McClement, Faculty of Nursing, *University of Manitoba*
Dr. Jeff Sisler, CancerCare Manitoba, *Health Sciences Centre*

2004–2005 FISCAL EXPENDITURES OVERVIEW

Total Expenditures

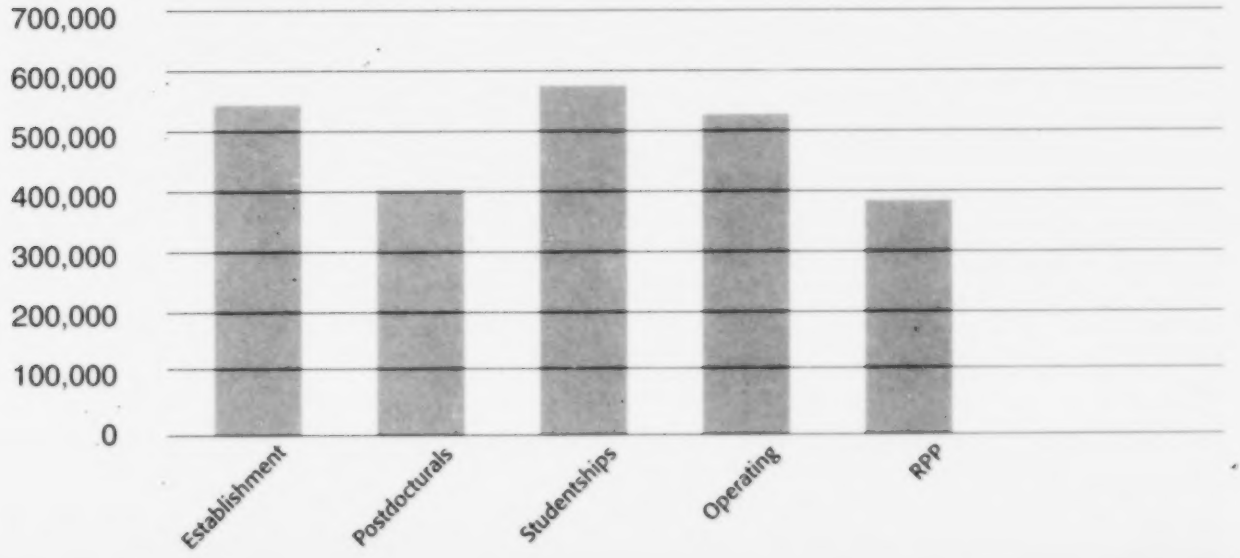
	Amount	%
Total	**$2,689,980**	**100.0**
Grants & Awards	$2,466,364	91.7
Administration	$223,616	8.3

Administration

	Amount	%
Total	**$223,616**	**100.0**
Salaries	$173,119	77.4
Supplies & Office Maintenance	$43,959	19.7
Miscellaneous	$6,538	2.9

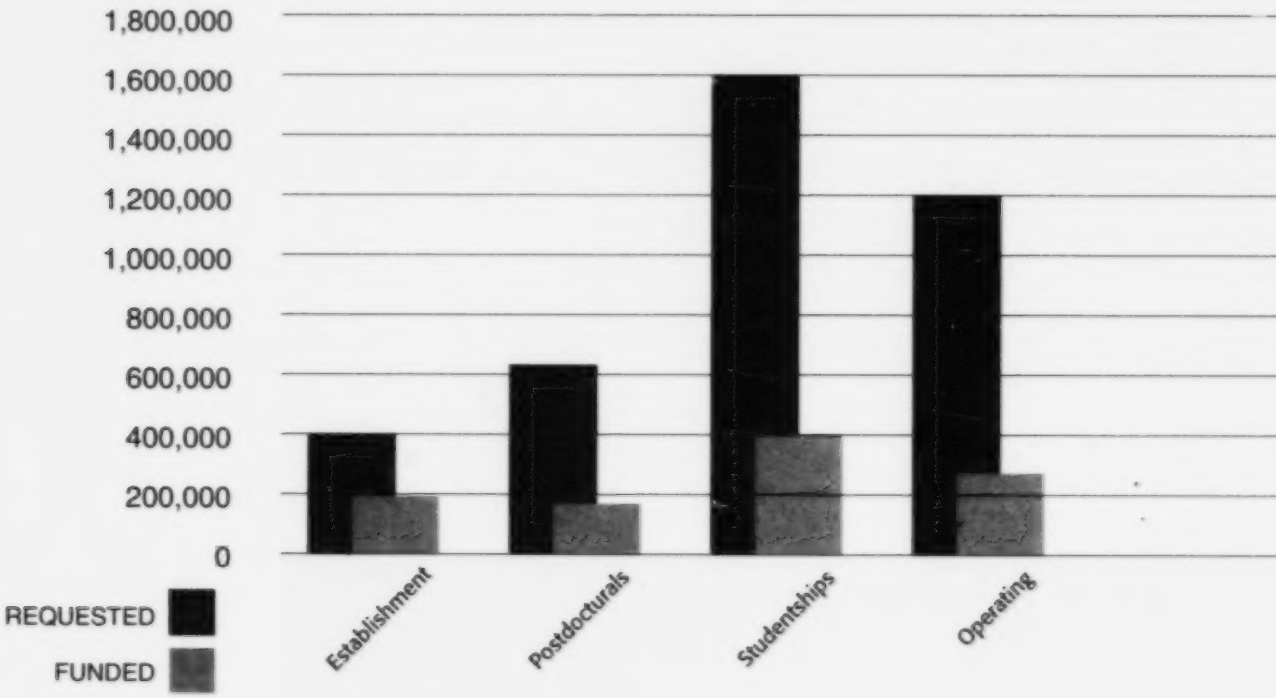
New and Renewal Grants and Awards

	#	Amount	%
Total	**84**	**$2,466,364**	**100.0**
Establishment Grants	16	543,550	22.0
Postdoctoral Awards	11	401,500	16.3
Studentship Awards	34	578,000	23.4
Operating Grants	11	529,301	21.5
Regional Partnership Grants	8	388,513	15.8
Bridge Funding Grant	1	13,000	0.5
Sponsorship and Postdoctoral Travel Award	1	2,500	0.1
Dissertation Award	2	10,000	0.4



New Grants and Awards

Category	# Received	Amount	# Funded	Amount
Establishment Grants	11	409,244	7	266,577
Postdoctoral Awards	18	630,000	8	144,000
Studentship Awards	94	1,598,000	24	408,000
Operating Grants	23	1,180,075	5	283,977
Dissertation Awards	3	15,000	2	10,000
Totals	149	3,832,319	46	1,112,554

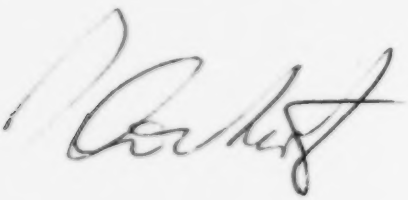


THE MANITOBA HEALTH RESEARCH COUNCIL

MANAGEMENT REPORT

The accompanying financial statements are the responsibility of management and have been prepared in accordance with generally accepted accounting principles. In management's opinion, the financial statements have been properly prepared and of necessity include some amounts based upon management's best estimates and judgements.

As management is responsible for the integrity of the financial statements, management has established systems of internal control to provide assurance that assets are properly accounted for and safeguarded from loss.



John C. Docherty, Ph.D.
Executive Director
May 24, 2005

BDO

BDO Dunwoody LLP
Chartered Accountants
and Advisors
www.bdo.ca

700 - 200 Graham Avenue
Winnipeg Manitoba Canada R3C 4L
Telephone (204) 956-7200
Telefax (204) 926-7201

Auditors' Report

To the Legislative Assembly of Manitoba:

We have audited the statement of financial position of **MANITOBA HEALTH RESEARCH COUNCIL** as at March 31, 2005 and the statements of operations and fund balances and cash flows for the year then ended. These financial statements are the responsibility of the organization's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the organization as at March 31, 2005 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

BDO Dunwoody LLP

Chartered Accountants

Winnipeg, Manitoba
May 24, 2005

MANITOBA HEALTH RESEARCH COUNCIL
Statement of Financial Position

March 31	2005	2004
Assets		
Current Assets		
Cash and bank (Note 2)	$ -	$ 42,285
Short-term investments		
Market value 2005- $897,621 (2004 - $901,158)	897,494	864,030
Accounts receivable	1,275	-
Accrued interest receivable	10,365	10,476
Prepaid expenses	2,156	2,157
Deposits	500	500
	911,790	919,448
Capital assets (Note 3)	4,126	4,266
	$ 915,916	$ 923,714
Liabilities and Fund Balances		
Current Liabilities		
Bank indebtedness (Note 2)	$ 142,215	$ -
Accounts payable and accrued liabilities	13,065	10,396
Research grants payable	246,022	142,980
	401,302	153,376
Commitments (Note 5)		
Fund Balances		
General Research Fund (Page 4)	493,966	788,839
Regional Partnerships Program Fund (Page 4)	20,648	(18,501)
	514,614	770,338
	$ 915,916	$ 923,714

Approved on behalf of the Board:

Director

Director

The accompanying summary of significant accounting policies and notes are an integral part of these financial statements.

MANITOBA HEALTH RESEARCH COUNCIL
Statement of Operations and Fund Balances

For the year ended March 31			2005	2004
	General Research Fund	Regional Partnership Fund	Total	Total
Revenue				
Province of Manitoba grants	$ 1,952,600	$ 427,662	$ 2,380,262	$ 2,313,422
Grants returned /rescinded	6,472	-	6,472	148,740
Investment income	47,522	-	47,522	50,763
	2,006,594	427,662	2,434,256	2,512,925
Expenditures				
Administration (Page 9)	223,616	-	223,616	156,684
Personnel awards	992,000	38,500	1,030,500	789,500
Research grants	1,085,851	350,013	1,435,864	1,348,203
	2,301,467	388,513	2,689,980	2,294,387
Excess (deficiency) of revenue over expenditures for the year	(294,873)	39,149	(255,724)	218,538
Fund balances, beginning of year	788,839	(18,501)	770,338	551,800
Fund balances, end of year (Page 3)	$ 493,966	$ 20,648	$ 514,614	$ 770,338

The accompanying summary of significant accounting policies and notes are an integral part of these financial statements.

MANITOBA HEALTH RESEARCH COUNCIL
Statement of Cash Flows

For the year ended March 31	2005	2004
Cash Flows from Operating Activities		
Excess (deficiency) of revenue over expenditures for the year	$ (255,724)	$ 218,538
Adjustments for		
Amortization of capital assets	932	1,067
	(254,792)	219,605
Changes in non-cash working capital balances		
Short-term investments	(33,464)	(164,711)
Accounts receivable	(1,275)	589
Accrued interest receivable	111	(292)
Prepaid expenses	1	(756)
Accounts payable and accrued liabilities	2,669	2,450
Research grants payable	103,042	(49,855)
	(183,708)	7,030
Cash Flows from Investing Activities		
Purchase of capital assets	(792)	-
Increase (decrease) in cash and cash equivalents during the year	(184,500)	7,030
Cash, beginning of year	42,285	35,255
Cash (bank indebtedness), end of year	$ (142,215)	$ 42,285
Supplementary Information:		
Interest received	$ 47,633	$ 41,844

The accompanying summary of significant accounting policies and notes are an integral part of these financial statements.

MANITOBA HEALTH RESEARCH COUNCIL
Summary of Significant Accounting Policies

March 31, 2005

These financial statements have been prepared by management in accordance with Canadian generally accepted accounting principles.

Financial Instruments

The organization's financial instruments consist of cash, accounts receivable, short-term investments, bank indebtedness, research grants payable and accounts payable. Unless otherwise noted, it is management's opinion that the organization is not exposed to significant interest, currency or credit risks arising from these financial instruments. The fair values of these financial instruments approximate their carrying values, unless otherwise noted.

Short-Term Investments

Short-term investments are stated at the lower of cost and market value.

Capital Assets

Capital assets are stated at cost less accumulated amortization. Amortization, based on the estimated useful life of the asset, is calculated as follows:

Office equipment	20% diminishing balance basis
Computer equipment	20% diminishing balance basis

Fund Accounting

The Manitoba Health Research Council follows the restricted fund method of accounting for contributions.

The General Research Fund reports only restricted resources that are used for research purposes. General research grants are charged to expenditures in the year the funding is committed for, by Council. Research grants returned to or rescinded by the Council are recorded as revenues when received or rescinded.

Regional Partnership awards are charged to expenditures when funding is received from the Province of Manitoba. Regional partnership awards returned to or rescinded by the Council are recorded as revenues when received or rescinded.

Revenue Recognition

Grant revenue is reflected in income in the period in which the grant is received or becomes receivable. Interest income is recognized as revenue when earned and is allocated proportionately to the Funds on the basis of monthly Fund balances.

Personnel Awards

Personnel awards and their renewals are charged to expenditures when funding is approved by Council.

Administrative Expenditures

Administration expenses are allocated 100% to the Research Fund.

March 31, 2005

1. Entity Definition

The Manitoba Health Research Council was established by The Manitoba Health Research Council Act to promote and assist basic, clinical and applied research in the health sciences in Manitoba. The Manitoba Health Research Council is a registered charity and is exempt from tax under the Income Tax Act.

2. Cash and Bank (Bank Indebtedness)

	2005	2004
Bank of Montreal current account	$ 41,727	$ 26,546
Wellington West cash account	(183,942)	15,739
	$ (142,215)	$ 42,285

Subsequent to March 31, 2005 the Council sold short-term investments to offset the shortfall in the Wellington West cash account.

3. Capital Assets

	2005		2004	
	Cost	Accumulated Amortization	Cost	Accumulated Amortization
Office equipment	$ 6,375	$ 4,871	$ 6,375	$ 4,025
Computer equipment	5,434	2,812	4,642	2,726
	$ 11,809	$ 7,683	$ 11,017	$ 6,751
Cost less accumulated amortization		$ 4,126		$ 4,266

4. Related Party Transactions

Manitoba Health Research Council is related to all Province of Manitoba departments and agencies. During the year, the Council had the following transactions with related organizations:

	2005	2004
Grant Revenue	$ 2,380,262	$ 2,313,422
Office Rent at no charge - University of Manitoba	-	-

These transactions are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

March 31, 2005

5. Commitments

The Manitoba Health Research Council has committed grants and awards under the General Research Fund and the Regional Partnership Fund as follows:

Year	General Research Fund	Regional Partnership Fund	Total
2006	$ 960,698	$ -	$ 960,698
2007	70,033	-	70,033
	$ 1,030,731	$ -	$ 1,030,731

Commitments of future years of the General Research Fund and Regional Partnership Fund are not recorded as an expenditure in the year of commitment, they are recorded as an expenditure in the year they are committed for.

These commitments will be funded as follows:

Current General Research Fund Balance	$ 493,966
Future Province of Manitoba grants	536,765
	$ 1,030,731

6. Economic Dependence

The Manitoba Health Research Council relies almost entirely on grants from the Province of Manitoba.

MANITOBA HEALTH RESEARCH COUNCIL
Schedule of Administrative Expenses

For the year ended March 31	2005	2004
Accounting and audit	$ 3,438	$ 3,490
Amortization	932	1,067
Bank charges and interest	160	150
Communications	16,710	-
Conferences, meetings and travel	2,816	-
Council and committee expenses	5,680	20,536
Delivery	2,655	3,704
GST expense	-	985
Insurance	4,272	3,477
Parking	888	-
Printing, stationery and office supplies	8,566	6,544
Promotions	1,902	-
Repairs and maintenance	1,300	1,090
Salaries and benefits	173,119	114,632
Telephone	1,178	1,009
	$ 223,616	$ 156,684

MRC

MANITOBA HEALTH RESEARCH COUNCIL

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Winnipeg, Manitoba, Canada R3E 0W3
Telephone: (204) 775-1096
Fax: (204) 786-5401
E-mail: info@mhrc.mb.ca
Website: www.mhrc.mb.ca